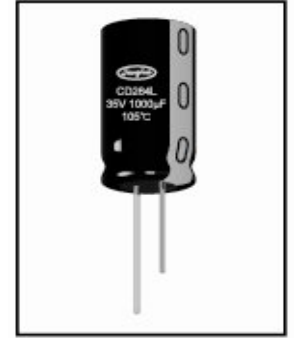
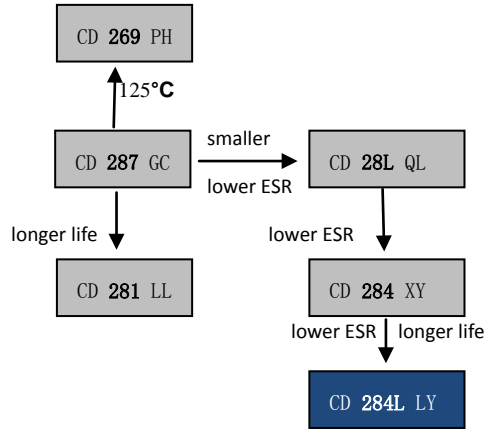


# CD284L LY SERIES



6000~10000h at 105°C

- Higher ripple current capability and smaller sizes than CD284 series
- Lower Impedance at high frequency
- Load life of 6000 to 10000hrs

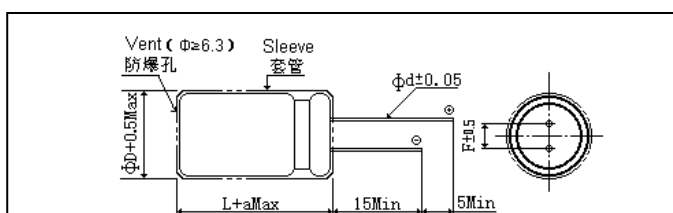


Item	Characteristics																														
Operating Temperature Range(°C)	-40 ~ +105																														
Rated Voltage Range (V)	6.3 ~ 100																														
Capacitance Range(µF)	8.2~8200																														
Capacitance Tolerance (20°C,120Hz)	±20%																														
Leakage Current (µA)	After 2 minutes at 20°C application of rated voltage, leakage current is not more than 0.01CV or 3uA, whichever is greater C:Nominal Capacitance(µF) V:Rated Voltage(V)																														
Dissipation Factor (20°C, 120Hz)	<table border="1"> <thead> <tr> <th>WV(V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>Tan δ(max)</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> <td>0.08</td> <td>0.08</td> </tr> </tbody> </table> <p>For Capacitances&gt;1000µF add 0.02 to every 1000µF</p>	WV(V)	6.3	10	16	25	35	50	63	80	100	Tan δ(max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.08										
WV(V)	6.3	10	16	25	35	50	63	80	100																						
Tan δ(max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.08																						
Stability at Low Temperature (Impedance ratio at 120Hz)	<table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>Z<sub>-25°C</sub>/Z<sub>+20°C</sub></td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z<sub>-40°C</sub>/Z<sub>+20°C</sub></td> <td>12</td> <td>10</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	Rated Voltage	6.3	10	16	25	35	50	63	80	100	Z <sub>-25°C</sub> /Z <sub>+20°C</sub>	4	3	2	2	2	2	2	2	2	Z <sub>-40°C</sub> /Z <sub>+20°C</sub>	12	10	8	6	4	3	3	3	3
Rated Voltage	6.3	10	16	25	35	50	63	80	100																						
Z <sub>-25°C</sub> /Z <sub>+20°C</sub>	4	3	2	2	2	2	2	2	2																						
Z <sub>-40°C</sub> /Z <sub>+20°C</sub>	12	10	8	6	4	3	3	3	3																						

	Useful Life		Load Life	Endurance Life	Shelf Life
Life Time	φ ≤6.3: 8000h φ =8: 10000h φ ≥10:12000h	φ >8:110000h	φ ≤6.3: 6000h φ =8: 8000h φ ≥10:10000h	φ ≤6.3: 7000h φ =8: 10000h φ ≥10:12000h	500h
Leakage Current	Not more than specified value		Not more than specified value	Not more than specified value	Not more than specified value
Capacitance Change	Within ±30% of initial value (6.3V, 10V: ±40%)		Within ±25% of initial value (6.3V, 10V: ±30%)	Within ±25% of initial value (6.3V, 10V: ±30%)	Within ±20% of initial value
Dissipation Factor	No more than 300% of specified value (6.3V, 10V: ±400%)		Not more than 200% of specified value (6.3V, 10V: ±300%)	Not more than 200% of specified value (6.3V, 10V: ±300%)	Not more than 200% of specified value
Condition: Applied Voltage Applied Current Applied Temperature	Ur Ir 105°C	Ur 1.4xlr 60°C	Ur Ir 105°C	Ur Ir= 0 105°C	Ur Ir= 0 105°C  After test: Ur to be applied for 30min>24h before measurement

## Dimensions

mm



ΦD	5	6.3	8	10	12.5	16	18
F	2.0	2.5	3.5	5.0		7.5	
Φd		0.5		0.6		0.8	
a		1.5			2.0		

## Frequency Coefficient

Freq(Hz)	120	1K	10K	100K
Cap(µF)				
8.2~33	0.42	0.70	0.90	1.00
47~270	0.50	0.73	0.92	1.00
330~680	0.55	0.77	0.94	1.00
820~1800	0.60	0.80	0.96	1.00
2200~6800	0.70	0.85	0.98	1.00

## Temperature Coefficient

Temperature(°C)	≤65	+85	+105
Coefficient	2.0	1.7	1.0

# CD284L LY SERIES



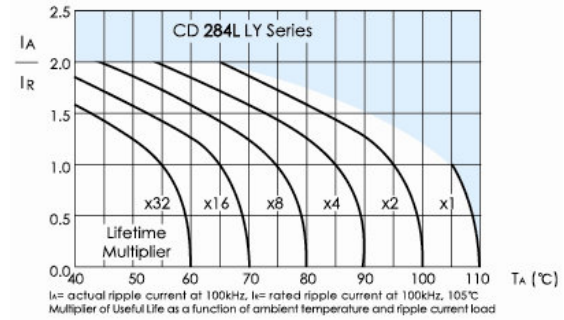
## Ratings for CD 284L LY Series

U <sub>R</sub> (Surge Voltage) Code	Rated Capacitance	Max ESR 20°C, 120Hz	Max Imp 20°C, 100kHz	Max Imp 20°C, 100kHz	Rated Ripple Current 105°C, 100KHz	Size ΦD×L	P/N
(v)	(μF)	(Ω)	(Ω)	(Ω)	(mAmps)	(mm)	-
<b>6.3 (7.2) 0J</b>	220	1.327	0.22	0.80	345	5×11.5	ECR0JLY221M□□050011
	470	0.621	0.094	0.35	540	6.3×11.5	ECR0JLY471M□□063011
	820	0.356	0.056	0.19	945	8×11.5	ECR0JLY821M□□080011
	1200	0.243	0.045	0.15	1250	8×16	ECR0JLY122M□□080016
	1200	0.243	0.039	0.14	1330	10×12.5	ECR0JLY122M□□100012
	1500	0.195	0.029	0.11	1500	8×20	ECR0JLY152M□□080020
	1800	0.162	0.028	0.10	1760	10×16	ECR0JLY182M□□100016
	2200	0.145	0.020	0.060	1960	10×20	ECR0JLY222M□□100020
	2700	0.118	0.018	0.054	2250	10×25	ECR0JLY272M□□100025
	3900	0.088	0.017	0.043	2480	12.5×20	ECR0JLY392M□□125020
	4700	0.079	0.015	0.038	2900	12.5×25	ECR0JLY472M□□125025
	5600	0.071	0.013	0.033	3450	12.5×30	ECR0JLY562M□□125030
	6800	0.062	0.015	0.038	3250	16×20	ECR0JLY682M□□160020
	6800	0.062	0.012	0.031	3570	12.5×35	ECR0JLY682M□□125035
	8200	0.058	0.013	0.035	2630	16×25	ECR0JLY822M□□160025
<b>10 (13) 1A</b>	150	1.681	0.22	0.80	345	5×11.5	ECR1ALY151M□□050011
	330	0.764	0.094	0.35	540	6.3×11.5	ECR1ALY331M□□063011
	680	0.371	0.056	0.19	945	8×11.5	ECR1ALY681M□□080011
	1000	0.252	0.045	0.15	1250	8×16	ECR1ALY102M□□080016
	1000	0.252	0.039	0.14	1330	10×12.5	ECR1ALY102M□□100012
	1500	0.168	0.029	0.11	1500	8×20	ECR1ALY152M□□080020
	1500	0.168	0.028	0.10	1760	10×16	ECR1ALY152M□□100016
	1800	0.140	0.020	0.060	1960	10×20	ECR1ALY182M□□100020
	2200	0.127	0.018	0.054	2250	10×25	ECR1ALY222M□□100025
	3300	0.092	0.017	0.043	2480	12.5×20	ECR1ALY332M□□125020
	3900	0.078	0.015	0.038	2900	12.5×25	ECR1ALY392M□□125025
	4700	0.071	0.013	0.033	3450	12.5×30	ECR1ALY472M□□125030
	4700	0.071	0.015	0.038	3250	16×20	ECR1ALY472M□□160020
	5600	0.064	0.012	0.031	3570	12.5×35	ECR1ALY562M□□125035
	6800	0.057	0.013	0.035	3630	16×25	ECR1ALY682M□□160025
<b>16 (20) 1C</b>	100	2.123	0.22	0.80	345	5×11.5	ECR1CLY101M□□050011
	220	0.965	0.094	0.35	540	6.3×11.5	ECR1CLY221M□□063011
	470	0.452	0.056	0.19	945	8×11.5	ECR1CLY471M□□080011
	680	0.312	0.045	0.15	1250	8×16	ECR1CLY681M□□080016
	680	0.312	0.039	0.14	1330	10×12.5	ECR1CLY681M□□100012
	1000	0.212	0.029	0.11	1500	8×20	ECR1CLY102M□□080020
	1000	0.212	0.028	0.10	1760	10×16	ECR1CLY102M□□100016
	1500	0.142	0.020	0.060	1960	10×20	ECR1CLY152M□□100020
	1800	0.118	0.018	0.054	2250	10×25	ECR1CLY182M□□100025
	2200	0.109	0.017	0.043	2480	12.5×20	ECR1CLY222M□□125020
	2700	0.088	0.015	0.038	2900	12.5×25	ECR1CLY272M□□125025
	3300	0.080	0.013	0.033	3450	12.5×30	ECR1CLY332M□□125030
	3300	0.080	0.015	0.038	3250	16×20	ECR1CLY332M□□160020
	3900	0.068	0.012	0.031	3570	12.5×35	ECR1CLY392M□□125035
	4700	0.062	0.013	0.035	3630	16×25	ECR1CLY472M□□160025
<b>25 (32) 1E</b>	68	2.732	0.22	0.80	345	5×11.5	ECR1ELY680M□□050011
	150	1.238	0.094	0.35	540	6.3×11.5	ECR1ELY151M□□063011
	330	0.563	0.056	0.19	945	8×11.5	ECR1ELY331M□□080011
	390	0.476	0.045	0.15	1250	8×16	ECR1ELY391M□□080016
	470	0.395	0.039	0.14	1330	10×12.5	ECR1ELY471M□□100012
	560	0.332	0.029	0.11	1500	8×20	ECR1ELY561M□□080020
	680	0.273	0.028	0.10	1760	10×16	ECR1ELY681M□□100016
	820	0.227	0.020	0.060	1960	10×20	ECR1ELY821M□□100020
	1000	0.186	0.018	0.054	2250	10×25	ECR1ELY102M□□100025
	1500	0.124	0.017	0.043	2480	12.5×20	ECR1ELY152M□□125020
	1800	0.103	0.015	0.038	2900	12.5×25	ECR1ELY182M□□125025
	2200	0.097	0.013	0.033	3450	12.5×30	ECR1ELY222M□□125030
	2200	0.097	0.015	0.038	3250	16×20	ECR1ELY222M□□160020
	2700	0.079	0.012	0.031	3570	12.5×35	ECR1ELY272M□□125035
	3300	0.072	0.013	0.035	3630	16×25	ECR1ELY332M□□160025
<b>35 (44) 1V</b>	47	3.388	0.22	0.80	345	5×11.5	ECR1VLY470M□□050011
	100	1.592	0.094	0.35	540	6.3×11.5	ECR1VLY101M□□063011
	220	0.724	0.056	0.19	945	8×11.5	ECR1VLY221M□□080011
	270	0.590	0.045	0.15	1250	8×16	ECR1VLY271M□□080016
	330	0.483	0.039	0.14	1330	10×12.5	ECR1VLY331M□□100012
	390	0.408	0.029	0.11	1500	8×20	ECR1VLY391M□□080020
	470	0.339	0.028	0.10	1760	10×16	ECR1VLY471M□□100016
	560	0.284	0.020	0.060	1960	10×20	ECR1VLY561M□□100020
	680	0.234	0.018	0.054	2250	10×25	ECR1VLY681M□□100025
	1000	0.159	0.017	0.043	2480	12.5×20	ECR1VLY102M□□125020
	1200	0.133	0.015	0.038	2900	12.5×25	ECR1VLY122M□□125025
	1500	0.106	0.013	0.033	3450	12.5×30	ECR1VLY152M□□125030
	1500	0.106	0.015	0.038	3250	16×20	ECR1VLY152M□□160020
	1800	0.088	0.012	0.031	3570	12.5×35	ECR1VLY182M□□125035
	2200	0.084	0.013	0.035	2630	16×25	ECR1VLY222M□□160025
<b>50 (63) 1H</b>	27	4.915	0.34	1.18	238	5×11.5	ECR1HLY270M□□050011
	56	2.370	0.14	0.50	385	6.3×11.5	ECR1HLY560M□□063011
	100	1.327	0.074	0.22	724	8×11.5	ECR1HLY101M□□080011
	120	1.106	0.061	0.18	950	8×16	ECR1HLY121M□□080016
	150	0.885	0.061	0.18	979	10×12.5	ECR1HLY151M□□100012
	180	0.737	0.046	0.14	1190	8×20	ECR1HLY181M□□080020
	220	0.603	0.042	0.12	1370	10×16	ECR1HLY221M□□100016
	270	0.491	0.030	0.090	1580	10×20	ECR1HLY271M□□100020
	330	0.402	0.028	0.085	1870	10×25	ECR1HLY331M□□100025
	470	0.282	0.027	0.068	2050	12.5×20	ECR1HLY471M□□125020
	560	0.237	0.023	0.059	2410	12.5×25	ECR1HLY561M□□125025
	680	0.195	0.021	0.052	2860	12.5×30	ECR1HLY681M□□125030
	820	0.162	0.019	0.051	2960	16×20	ECR1HLY821M□□160020
	820	0.162	0.023	0.059	2730	12.5×35	ECR1HLY821M□□125035
	1000	0.133	0.021	0.056	3010	16×25	ECR1HLY102M□□160025
<b>63 (79) 1J</b>	15	7.962	0.88	3.5	173	5×11.5	ECR1JLY150M□□050011
	33	3.619	0.35	1.4	278	6.3×11.5	ECR1JLY330M□□063011
	82	1.456	0.22	0.88	525	8×11.5	ECR1JLY820M□□080011
	100	1.194	0.16	0.64	688	8×16	ECR1JLY101M□□080016
	120	0.995	0.15	0.60	725	10×12.5	ECR1JLY121M□□100012
	150	0.796	0.12	0.48	861	8×20	ECR1JLY151M□□080020
	180	0.663	0.11	0.44	998	10×16	ECR1JLY181M□□100016
	220	0.543	0.078	0.31	1200	10×20	ECR1JLY221M□□100020
	330	0.362	0.069	0.28	1410	10×25	ECR1JLY331M□□100025
	390	0.306	0.060	0.19	1570	12.5×20	ECR1JLY391M□□125020
	470	0.254	0.043	0.14	1990	12.5×25	ECR1JLY471M□□125025
	560	0.213	0.035	0.13	2410	12.5×30	ECR1JLY561M□□125030
	560	0.213	0.043	0.14	2100	16×20	ECR1JLY561M□□160020
	680	0.176	0.033	0.11	2620	12.5×35	ECR1JLY681M□□125035
	820	0.146	0.027	0.090	2940	12.5×40	ECR1JLY821M□□125040
820	0.146	0.032	0.096	2730	16×25	ECR1JLY821M□□160025	
820	0.146	0.038	0.10	2500	18×20	ECR1JLY821M□□180020	
1200	0.100	0.024	0.068	2990	16×31.5	ECR1JLY122M□□160031	
1200	0.100	0.031	0.084	2800	18×25	ECR1JLY122M□□180025	
1500	0.080	0.021	0.057	3040	16×35.5	ECR1JLY152M□□160035	
1500	0.080	0.025	0.068	3300	18×31.5	ECR1JLY152M□□180031	
1800	0.066	0.020	0.054	3570	18×35.5	ECR1JLY182M□□180035	
2200	0.066	0.018	0.049	3670	18×40	ECR1JLY222M□□180040	

## Ratings for CD 284L LY Series

$U_R$ (Surge Voltage) Code	Rated Capacitance	Max ESR 20°C, 120Hz	Max Imp 20°C, 100kHz	Max Imp 20°C, 100kHz	Rated Ripple Current 105°C, 100kHz	Size ΦD×L	P/N
(V)	(μF)	(Ω)	(Ω)	(Ω)	(mA <sub>rms</sub> )	(mm)	-
<b>80 (100) 1K</b>	12	8.846	1.4	5.6	163	5×11.5	ECR1KLY120M□□050011
	33	3.217	0.57	2.3	267	6.3×11.5	ECR1KLY330M□□063011
	56	1.896	0.36	1.4	462	8×11.5	ECR1KLY560M□□080011
	68	1.561	0.25	1.0	585	8×16	ECR1KLY680M□□080016
	82	1.295	0.23	0.96	624	10×12.5	ECR1KLY820M□□100012
	100	1.062	0.19	0.76	735	8×20	ECR1KLY101M□□080020
	120	0.885	0.17	0.72	780	10×16	ECR1KLY121M□□100016
	180	0.590	0.12	0.52	1040	10×20	ECR1KLY181M□□100020
	220	0.483	0.11	0.47	1170	10×25	ECR1KLY221M□□100025
	270	0.393	0.085	0.31	1430	12.5×20	ECR1KLY271M□□125020
	330	0.322	0.060	0.23	1620	12.5×25	ECR1KLY331M□□125025
	390	0.272	0.051	0.21	1950	12.5×30	ECR1KLY391M□□125030
	390	0.272	0.058	0.21	1750	16×20	ECR1KLY391M□□160020
	470	0.226	0.043	0.17	2140	12.5×35	ECR1KLY471M□□125035
	560	0.190	0.036	0.15	2340	12.5×40	ECR1KLY561M□□125040
	560	0.190	0.044	0.16	2210	16×25	ECR1KLY561M□□160025
	560	0.190	0.054	0.18	1950	18×20	ECR1KLY561M□□180020
	680	0.156	0.033	0.12	2400	16×31.5	ECR1KLY681M□□160031
	820	0.129	0.038	0.13	2270	18×25	ECR1KLY821M□□180025
	820	0.129	0.029	0.10	2600	16×35.5	ECR1KLY821M□□160035
1000	0.106	0.031	0.11	2470	18×31.5	ECR1KLY102M□□180031	
1000	0.106	0.027	0.090	2860	16×40	ECR1KLY102M□□160040	
1200	0.088	0.027	0.084	2860	18×35.5	ECR1KLY122M□□180035	
1500	0.071	0.026	0.076	3510	18×40	ECR1KLY152M□□180040	
<b>100 (125) 2A</b>	8.2	12.946	1.4	5.6	163	5×11.5	ECR2ALY8R2M□□050011
	18	5.898	0.57	2.3	267	6.3×11.5	ECR2ALY180M□□063011
	33	3.217	0.36	1.4	462	8×11.5	ECR2ALY330M□□080011
	47	2.259	0.25	1.0	585	8×16	ECR2ALY470M□□080016
	56	1.896	0.23	0.96	624	10×12.5	ECR2ALY560M□□100012
	68	1.561	0.19	0.76	735	8×20	ECR2ALY68M□□080020
	82	1.295	0.17	0.72	780	10×16	ECR2ALY820M□□100016
	100	1.062	0.12	0.52	1040	10×20	ECR2ALY101M□□100020
	120	0.885	0.11	0.47	1170	10×25	ECR2ALY121M□□100025
	150	0.708	0.085	0.31	1430	12.5×20	ECR2ALY151M□□125020
	220	0.483	0.060	0.23	1620	12.5×25	ECR2ALY221M□□125025
	270	0.393	0.051	0.21	1950	12.5×30	ECR2ALY271M□□125030
	270	0.393	0.058	0.21	1750	16×20	ECR2ALY271M□□160020
	330	0.322	0.043	0.17	2140	12.5×35	ECR2ALY331M□□125035
	390	0.272	0.036	0.15	2340	12.5×40	ECR2ALY391M□□125040
	390	0.272	0.044	0.16	2210	16×25	ECR2ALY391M□□160025
	390	0.272	0.054	0.18	1950	18×20	ECR2ALY391M□□180020
	470	0.226	0.033	0.12	2400	16×31.5	ECR2ALY471M□□160031
	470	0.226	0.038	0.113	2270	18×25	ECR2ALY471M□□180025
	560	0.190	0.029	0.10	2600	16×35.5	ECR2ALY561M□□160035
560	0.190	0.031	0.11	2470	18×31.5	ECR2ALY561M□□180031	
680	0.156	0.027	0.090	2860	16×40	ECR2ALY681M□□160040	
680	0.156	0.027	0.084	2860	18×35.5	ECR2ALY681M□□180035	
820	0.129	0.026	0.076	3510	18×40	ECR2ALY821M□□180040	

Lifetime Diagram



Customer products are available on request.